

Opening Date: October 18, 2019
Closing Date: Open Until Closed
Work Location: Austin, Texas
Posting Number: 20-12
Monthly Salary: \$4,600 - \$6,503*
Group/Class: B23 /2365
Travel %: 10%
Division/Department: WSC/GW/Groundwater Availability Modeling
Number of Positions: 1
***Salary commensurate with experience and qualifications**

JOB VACANCY NOTICE

Groundwater Modeler / GIS Analyst (Hydrologist IV or Geoscientist IV)

*Texas Water Development Board, Stephen F. Austin Building
1700 North Congress Ave., Room 670, Austin, Texas 78701
Please contact Human Resources for accommodation requests.
Phone: (512) 475-2142
Apply at: Work in Texas www.workintexas.com OR
HR@twdb.texas.gov*

Veteran's Preference

Veterans, Reservists or Guardsmen with an MOS or additional duties that fall in the fields of 8831- Environmental Engineering Management Officer, 15WX – Weather, AG – Aerographer's Mate, OAR15 – Marine Environmental Response or other related fields pertaining to the minimum experience requirements may meet the minimum qualifications for this position and are highly encouraged to apply.

Additional Military Crosswalk information can be accessed at
http://www.hr.sao.texas.gov/Compensation/MilitaryCrosswalk/MOSC_NaturalResources.pdf.

Job Description Summary

Performs advanced (senior-level) geosciences or hydrological work. Work involves the compilation and documentation of source information; adherence to set processes and standards; the use and manipulation of various programming scripts; development and calibration of numerical groundwater flow models; analysis and interpretation of groundwater modeling results and water budgets; the use of GIS software to prepare maps, geodatabases, process data, and/or review input/output from models; writing reports; providing presentations; reviewing, analyzing, coordinating, or overseeing the collection and analysis of data and samples for technical reports and projects; preparing, reviewing, or evaluating model designs, results, and analysis and reports; and ensuring compliance with applicable statutes and regulations. May train or supervise others. Works under minimal supervision, with considerable latitude for the use of initiative and independent judgment. Reports to the Manager of the Groundwater Availability Modeling Department.

Essential Job Functions

- Collects and reviews technical data, analyzes findings, and assists with data calculations and the development of recommendations for programs or projects.
- Conducts scientific hydrogeological investigations to ensure that accurate and appropriate information is available for use in water resource management decisions; specifically, statutorily required model simulations, development of groundwater models, water budget analysis, model-related data evaluations, and documentation of related activities.
- Studies and documents quantities, distribution, disposition, and development of groundwater and surface waters in support of groundwater modeling.
- Maintains and prepares records and reports and presents technical evaluations and plans.
- Implements technical projects and completes design preparation, plans, estimates, and calculations.
- May develop or use hydrologic models for various applications.

Female and minority applicants are encouraged to apply.

Males born on or after January 1, 1960, will be required to present proof of Selective Service registration on the first day of employment or proof of exemption from Selective Service registration requirement. All offers of employment are contingent upon the candidate having legal authorization to work in the United States. Failure to present such authorization within the time specified by the U.S. Department of Labor will result in the offer being rescinded. Candidates must be eligible to work in the United States without requiring sponsorship. Only applicants interviewed will be notified of their selection or non-selection. Resumes will not be accepted in place of a completed State of Texas application unless indicated.

The Texas Water Development Board does not discriminate on basis of race, color, national origin, sex, religion, age, or disability in employment or provision of services, programs, or activities. Please visit TWDB Career Page: <http://www.twdb.texas.gov/jobs/> for more information.

TWDB participates in E-Verify! Information from each new employee's Form I-9 will be provided to the Social Security Administration (SSA) and, if necessary, the Department of Homeland Security (DHS) to confirm work authorization.



The TWDB is in compliance with the Americans with Disabilities Act and makes reasonable accommodations for applicants and employees with disabilities. If a reasonable accommodation is needed to participate in the job application or interview process, to perform essential job functions, and/or to receive other benefits of employment, please contact the Human Resources Division for assistance at (512) 475-2142. Deaf and hard of hearing applicants may contact our office via Relay Texas at 1-800-735-2989 (TTY/TDD).

Job Vacancy Notice (cont.)

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- Reviews the activities of contractors funded through the Groundwater Availability Modeling Program.
- Researches and delivers written and verbal responses to public, inter, and intra-agency inquiries. May include presentations at public meetings summarizing modeling studies and simulations.
- Adheres to and develops quality assurance procedures.
- May train others.
- Maintains confidential and sensitive information.
- Ensures individual and team files (electronic and hard versions) are appropriately maintained and timely disposed of in accordance with the agency's records retention procedures and schedule.
- Maintains required certifications and licenses and meets the continuing education needs and requirements of the position to include, attending mandatory training courses.
- May be required to operate a state or personal vehicle for business purposes.
- Performs other duties as assigned.

Minimum Qualifications

- Graduation from an accredited four-year college or university with a bachelor's degree in Hydrology, Water Resources, Geology, Hydrogeology, Natural Resources, Geography, or related field.
- Five to seven years work experience in related field for Hydrologist IV/Geoscientist IV
- Relevant education and experience may be substituted on a year-for-year basis.
- Licensed as a Professional Geoscientist in Texas is required for Geoscientist IV classification.
- Experience in developing and interpreting numerical groundwater flow models including analyzing water budgets, setting up predictive simulations to interpret changes in water levels or discharge to surface water, extracting data for estimates of groundwater volumes, and using PEST for model calibration or optimization.
- Experience with developing, using, or manipulating programs/scripts for model data extraction, adjustments to model files, and/or to process and manipulate ASCII data files for scientific applications. Examples may include Fortran, PERL, Python, or SQL.

Preferred Qualifications

- Experience in groundwater modeling using MODFLOW and Groundwater Vistas and is familiar with the Groundwater Availability Modeling Program.
- Experience with GIS applications; prefer experience using ESRI ArcGIS 10 (or later) software product suite with knowledge of the spatial analyst extension and exposure to geodatabase use and design and/or Seequent Leapfrog 3D visualization for geologic frameworks
- Experience or familiarity with ArcPy or use of Python scripting within the ArcGIS geoprocessing environment to perform geospatial data analysis, data conversion, data management, and automated map and table reports.
- Experience or familiarity with geostatistical methods.

Knowledge, Skills, and Abilities (KSAs)

- Knowledge of local, state, and federal laws and regulations relevant to the Groundwater Availability Modeling Department; and of the principles and practices of public administration.
- Knowledge of basic hydrological and geological concepts, techniques, and analysis.
- Knowledge of numerical groundwater flow modeling.
- Knowledge in developing and/or using commercial pre- and post-processors for numerical groundwater flow models.
- Knowledge of programming including the ability/aptitude to acquire, manipulate, and develop water resources data in multiple formats and/or from various sources.
- Knowledge of water budget development and interpretation.
- Knowledge of geographic information systems (GIS) and aptitude to visualize three-dimensionally.

Job Vacancy Notice (cont.)

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- Skills in using Microsoft Office programs such as Word, Excel, Outlook, and Access.
- Skills in use of internet, email, word processing, spreadsheet, presentation, and database software.
- Skills in designing and implementing regional and local spatial analysis for groundwater studies.
- Skill in writing, editing, and reviewing technical scientific reports.
- Ability to adhere to work schedules, follow procedures with respect to leave and submit accurate timesheets by prescribed deadlines.
- Ability to make mature, objective decisions and identify areas of potential problems.
- Ability to perform effectively and willingly when changes occur in scope and nature of the work and work environment.
- Ability to perform routine and non-routine work assignments accurately and on-time with little or no supervision.
- Ability to perform assigned duties and improve work habits and/or output.
- Ability to complete assigned work, on time, neatly and with infrequent errors.
- Ability to interpret policies, procedures, and regulations.
- Ability to provide prompt, courteous and accurate assistance and clear and concise communication to internal and external stakeholders both verbally and in writing.
- Ability to work and cooperate with others in a team environment.
- Ability to manage multiple tasks.
- Ability to stand/sit/move with no physical limitations or aids to perform activities such as retrieve/replace files in a large file system for boxes up to 30 lbs.
- Ability and willingness to travel 10% of the time, primarily within the State of Texas.
- Ability to operate a vehicle (state or personal) for state business and maintain a driver's license and driving record that complies with state and agency requirements.
- Ability to work days that may exceed 8 hours, including early mornings, nights, and weekends.
- Ability to train others.

Remarks

- Copy of required academic transcripts and/or licensures and driving record must be submitted at the time of hire. Failure to provide required documentation will result in no further consideration for employment.
- Important Notice: Otherwise qualified candidates who are ultimately considered for potential employment with the Texas Water Development Board may be the subject of a request for any criminal history record information maintained by the Texas Department of Public Safety (DPS). Evidence of a criminal conviction or other relevant information obtained from the DPS shall not automatically disqualify an individual from employment with the Texas Water Development Board.